

## DELICATE BALANCES.

SCALES THAT WILL MEASURE THE WEIGHT OF A SIGNATURE.

Some Are So Nicely Adjusted That a Single Hair From an Eyelash Will Act on the Sensitive Mechanism. Accuracy of Their Weights.

So sensitive are the modern chemists' and jewelers' balances that not merely can they weigh accurately a quarter inch long human hair, but record as well the differences in weight between any number of such pieces taken from the heads of different persons. And so absolutely correct are these scales that the same samples of hair weighed on a number of balances will show identical differences.

With a balance of this sort it is possible to weigh the infinitesimal quantity of ink required to write your signature. All that is necessary is to weigh the piece of blank paper, then to write your name on it and to weigh the paper again, taking the difference between the two weights as that of the ink.

Down in Maiden lane, in the great jewel district, a scale expert was talking of these things the other day. Within glass fronted closets lining his office were scores upon scores of balances, inclosed in glass and mahogany framed cases.

"Delicate?" said the expert, repeating a question. "We have jewelers' scales here that will weigh 500 carats of diamonds and will remain sensitive to the inconceivably slight weight of one five-hundredths of a carat. The moisture of your breath against one of the pans of this scale would throw it out of adjustment. Touching one end of the beam with a finger tip for ten seconds is enough to lengthen the beam. It would expand under the warmth of the hand sufficiently to throw the needle pointer off the center.

"But, from an expert's viewpoint, these scales are not the most remarkable. It is easy enough to make a light scale sensitive beyond all requirements of practical purposes. It is when we turn out a scale that can weigh heavier loads and still remain sensitive that we feel we have accomplished something. Here, for instance, is a scale that will hold 5,000 ounces in each pan and that will indicate the addition of as slight a weight as two grains. And here is another that will balance 500 ounces in each pan and at the same time indicate the difference between the weights of two pieces of paper.

"These are some of the tests that put American manufactured balances and scales to the front and that account for these instruments being exported to England and throughout Europe, to South America, to Mexico, to India and to Australia. All over the world, wherever science and the gold miner have penetrated, we send our scales."

"Wherein do the American made balances excel?" was asked. "Chiefly in wear and in composition of a very important alloy, which, like the pendulum of many clocks, is what is called 'compensating.' Bring a French or a German balance to this country, and it will act like an imported piano and many another musical instrument. The balance works excellently while in its home country, but it is not adapted to the variations of climate, moisture, heat and cold that must be anticipated when manufacturing these instruments to be sent all over the world.

"Who are our customers? Every chemist, every physicist, every assayer and jeweler. Scientific colleges and the technical institutions use scores on scores of balances. Then there are the miners and the smelters, the silversmiths, the steel and copper and lead and tin men, not to mention dozens upon dozens of others, including the government departments, the geological survey, the agricultural department, the medical supply departments of the army and navy, the mint and the assay office.

"Many balances are made especially to withstand the strains peculiar to the particular work for which they are intended. Ordinarily a balance consists of a slim arm of brass provided at the middle with a steel knife edge that rests on a highly polished plane of agate attached to the top of an upright brass pillar, stirrups of the scale pans being similarly suspended. But in a chemical balance, where the fumes of acids would attack steel, agate knife edges are substituted.

"With ordinary care and regular attention a good balance ought to last a man's lifetime. We had a balance to repair not long ago that had been in constant use for more than forty years.

"As much care is expended on the weights as is given to the scales. Most of the heavier weights are turned out of bars of brass and covered with a lacquer that makes them practically impervious to attack by moisture or fumes of acids. The lighter weights consist of platinum foil, which is even more durable than brass, providing the thin, tiny pieces are handled with ordinary attention and care. Still, despite all precautions, the weights will 'fall off,' and for accurate work it is necessary to test them from time to time.

"The diamond expert about to sail abroad for the markets of London and Paris, for example, usually 'buys a brand new set of weights before he quits these shores. Some of the experts buy a new balance every trip to make sure they are getting an instrument they can rely upon. When the diamonds have been weighed and bought the scale is offered for sale in the Paris markets and in this way the buyer gets rid of the incumbrance without loss to himself and on the next trip has the advantage of using another brand new scale."—New York Press.

## Benedict Bros.

## NEW LOCATION.

Washington Life Insurance Building,  
BROADWAY, COR. LIBERTY ST.  
NEW YORK.

The Watch and Jewelry House of Benedict Bros. was established in Wall Street in 1819 by Samuel W. Benedict, the father of the present Benedict Bros., which makes it probably the oldest in this line in this country.

The present Benedict Bros. removed to the corner of Cortlandt Street in 1863. They have long desired to have larger and fire-proof quarters, and now have, they believe, the most attractive jewelry store in the United States, and perhaps in the world.

Their specialties are fine Watches, Diamonds and other Precious Gems.

## BENEDICT BROTHERS

JEWELERS,  
141 Broadway, cor. Liberty St.,  
NEW YORK.

## Chas. W. Hedden &amp; Co.

UNDERTAKERS,  
72 Clinton Street,  
L. D. Telephone No. 59-B. BLOOMFIELD, N. J.  
Everything Furnished Pertaining to the Business.

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## HORSESHOEING,

426 Bloomfield Ave., near Orange St.

All interfering, overreaching, and lame horses shod in the most scientific manner and on approved principles. Perfect satisfaction guaranteed. Horses called for and brought home with care.

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Parties desiring to make contracts to have their premises kept clean of ashes, refuse, and garbage, can make favorable arrangements with

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**Cambridge Springs,**

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You ought to know all about it

Erie booklet, "The Bethesda of the Middle West," on application to the Ticket Agent or

D. W. Cooke, General Passenger Agent

New York.

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Cor. Montgomery and Orchard Streets

DEALER IN

FINE GROCERIES, PRO-

VISIONS, FRUITS,

Flour, Feed, Grain, Hay, &c

**SPECIAL OFFER**

ONE SAMPLE ORDER OF \$3.00 and upwards of Tea, Coffee, Spices, Extracts and Baking Powder, we will allow you 50 percent off and pay all express charges, so that you may thoroughly test the quality of the goods.

This is a chance that is seldom offered; it gives all a chance to purchase our goods at less than cost.

For full particulars a prompt attention and read Mr. Dawkins, care of The Great American Tea Co., 31 & 33 Vesey St., P. O. Box 989 New York

50c. Teas

25c. Coffee

Good Baking Powder, 12, 18, 24 and 36 lb.

For full particulars a prompt attention and read Mr. Dawkins, care of The Great American Tea Co., 31 & 33 Vesey St., P. O. Box 989 New York

## A STORY OF CRANES.

Novel Way in Which the South American Utilize the Birds.

The natives of Venezuela and adjoining countries on the north side of the river Amazon often avail themselves of the services of the native crane to care for their poultry and also use it in the place of a collar or shepherd dog to guard and herd their domestic animals. This remarkable bird, which the Indians call yakamik and the ornithologists Psophia crepitans, is found in a wild state in great forests that lie between the northern coasts of South America and the Amazon and British Guiana. The birds never leave the forests unless shot or captured.

They travel about in flocks of from 100 to 200 in search of the berries, fruits and insects upon which they subsist. Their usual gait is a slow and stately march, but they enliven themselves from time to time by leaping up in the air, executing eccentric and fancy waiters and striking the most absurd and preposterous attitudes. If pursued they endeavor to save themselves by running, for their flight is so weak, according to Schomburgk, that when they attempt to fly over a body of water of any considerable width they are often compelled to drop upon it and save themselves by swimming.

When alarmed they utter the peculiar cry which has obtained for them the name of trumpeters. The sound is something like that produced by a person endeavoring to shout the syllables "tow, tow, tow, tow, tow," with his mouth shut or the doleful noise made by children on New Year's day with their trumpets. The yakamiks usually deposit their eggs in a hollow in the ground, often at the foot of a tree.

A nest generally contains ten eggs of a pale green color. The young birds follow their mothers as soon as they are hatched, but do not lose their pretty down covering until several weeks old. The yakamiks are very readily tamed and prove valuable servants to the Indians, who domesticate them, and as they are courageous and will protect animals intrusted to their care at every risk of themselves even dogs are obliged to yield to their authority.

They may be trusted with the care of a flock of sheep or domestic fowls and every morning will drive the ducks and poultry to their feeding places and, carefully collecting any stragglers, bring them safely home at night. A yakamik soon learns to know and obey the voice of his master, follows him when permitted wherever he goes and appears delighted at receiving his caresses. It pines at his absence and welcomes his return and is extremely jealous of any rival. Should any animal attack its master, the yakamik in utmost fury attacks it with wings and beak, driving it away.

It presents itself regularly during meals, from which it chases all domestic animals and even the negroes who wait on the table, if it is not well acquainted with them, and only asks for a share of the entables after it has driven away all who might aspire to a favorable notice from the family.

## Ancient Way to Force Confessions.

In a remote village in Hungary a husband and his wife were found murdered, and their manservant, being arrested, confessed the deed, but stated that three brothers—neighbors of the old couple—had persuaded him to murder them and had divided the spoils, something like £500, with him. These three brothers were immediately arrested.

The judge did an unusual thing on the day of the funeral. He brought them in chains to the churchyard, placed them near the open grave and bade the priest in his address to praise the good qualities of the victims and end with the startling words, "And here stand their vile murderers at the grave." This was done, and the judge in the meantime watched the three brothers' faces to see if they looked guilty. This form of examination caused some indignation among the people of the neighborhood.—London News.

## Russians Who Never Take a Bath.

In Russia and in the Balkan states the baths are, as elsewhere, restricted entirely to the upper classes and may be regarded as a luxury of the rich. The peasantry in these countries—eye, and in the middle classes as well—never take a bath, practically speaking, and yet they seem to bear up heroically under the deprivation and to be perfectly oblivious to environments that can only be described as aromatic in the extreme. Baths would be of but little use to the Russian peasant, since he never undresses and he could hardly be expected to bathe in his clothes. He is manifestly of the opinion that if he keeps himself hermetically sealed no dust can possibly get at him, nor can one quite understand how it does happen that the dust does get to him.

## Beginning the Day Aright.

You remember perhaps the story of a Greek philosopher who had his boy every morning awakened from sleep by soft, sweet music. His purpose was that the boy might begin each day with thoughts of beauty and goodness. The idea was admirable. It is a glorious power we have to set the thoughts and feelings of our children for the day. It is so easy to make a bad start and so hard to get reset before we have lost the beauty of three or four hours. It is no light thing to have lived a half day meanly. Then we have to take account of the fact that a great many influences are capable of setting the day badly. The weather affects our boys and girls as it does us, and they are not experienced in a way to give them power by reason to rise over antagonism.

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THE ALWAYS-BUSY STORE

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## Great Tailor-Made Suit Purchase.

A WONDERFUL transaction—a deal involving over three hundred of the handsomest garments made this season by one of the largest manufacturers of high grade suits in the country.

## LESS THAN COST OF PRODUCTION,

—1-3 Off and 1-2 Regular Retail Prices.

Taking all things into consideration it is a marvelous opportunity, and the only drawback is that there are not nearly enough of them. Made of light weight cloths in black or colors, fancy mannish mixtures, fine voiles, mohairs, brillantines, taffetas and Pongee silks—blouse, Eton and jacket styles—skirts in either walking or dress lengths—the very latest ideas and effects. Divided this way:

Women's and Misses' Suits—Lot 1. Women's and Misses' Suits—Lot 2. Women's and Misses' Suits—Lot 3.

A variety of styles, including all sizes from 32 to 44 and to fit misses from 14 to 16 years, regularly worth 10.00 to 15.00, while they last, Stylish and serviceable cloths fashionably made and worth from 16.50 to 18.75—sizes from 32 to 36 and for misses from 14 to 18 years, High-class garments that were never meant to retail for any thing less than from 20.00 to 27.50, sizes 32 to 36 and 14 to 16 years,

Special 5.00 Each. Special 7.50 Each. Special 10.00 Each.

Women's and Misses' Suits—Lot 4. Misses' Stylish New Suits—Lot 5.

In this assortment are some of the finest suits shown here this season, beautiful styles and a complement of sizes—worth 30.00 to 40.00, About sixty suits for the school miss of from 14 to 18 years, ankle length skirts, regularly worth from 12.50 to 17.50—while they last,

Special 15.00 Each. Special 7.50 Each.

Photo Medallions, 15c, 21c, 25c and 35c. L. BAMBERGER & CO, Newark, N. J. Photo Medallions, 15c, 21c, 25c and 35c.

(Chancery A-361.)

SHERIFF'S SALE.—In the County of New Jersey, Between The Equities Building and Loan Association of Newark, N. J., complainant, and Patten E. Ashley et al, defendants.

N. J. for sale of mortgaged premises.

By virtue of the above stated writ of fieri facias, to me directed, I shall expose for sale by public vendue, at the Court House, in Newark, on Tuesday, the fourteenth day of June next, at two o'clock P. M. all those tracts or parcels of land and premises situate, lying and being in the town of Bloomfield, Essex county, New Jersey:

First Tract.—Beginning at a point in the east line of the street known as Railroad avenue (now Glenwood avenue) fifty feet south from the line of lands belonging to Bethlehem Knits; thence south forty-two and a half degrees, east five chains and forty-nine links to the pond and at the most southerly point of said pond; thence south along the borders of the pond at ordinary high water eighty-one and a half degrees east five chains; thence north fifty-eight degrees fifty-five minutes east one chain and thirty-seven links; thence north fourteen degrees and twenty-five minutes east three chains and thirty links; thence still along the borders of the pond north forty-eight and a half degrees west one chain and sixty-six links; thence north thirty-five degrees and thirty minutes west two chains and thirty-three links to lands of Bethlehem Knits; thence along his line south thirty-seven and a quarter degrees west three chains and forty-five links; thence north fifty-two and three-quarter degrees west west chain and forty-five links to the east line of Railroad avenue; thence southerly along said line to the place of beginning.

Also the lands lying on front of said tract to the center of said Railroad avenue, subject to the said street.

Second Tract.—Beginning at a point in the easterly line of the road leading from the Bloomfield Railroad depot to Orange (now Glenwood avenue), which point is the southwest corner of a tract of land conveyed by said Isaac D. Dodd to said Tryphena Ashley by deed dated May 28, 1896; and thence running (1) along said easterly side of said road in a southerly direction fifty feet; thence (2) in an easterly direction parallel with the easterly side of said tract so as above conveyed by said Isaac D. Dodd to said Tryphena Ashley to the pond; thence (3) along the borders of the pond at ordinary high water mark in a northerly direction to the southerly line of the said lot conveyed as above to said Tryphena Ashley; thence (4) along said southerly line in a westerly direction to the place of beginning. Being a strip of land fifty feet in width adjoining the first lot or tract herein.

Being the same two tracts of land conveyed to said Patten E. Ashley by Tryphena Ashley (widow) by deed dated April 4, 1901, and to be recorded with this mortgage.

Newark, N. J., May 9, 1904.

WILLIAM C. NICOLL, Sheriff.

August W. Reisinger, S. T.

## BLOOMFIELD

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Dealer in the Very Best Grades of

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Well Seasoned WOOD, Sawed or Split.

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STOVES, RANGES, FURNACES.

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